R307. Environmental Quality, Air Quality.

R307-345. Fabric and Vinyl Coatings.

#### R307-345-1. Purpose.

The purpose of this rule is to limit volatile organic compound (VOC) emissions from fabric and vinyl coating operations, which use roll, knife, or rotogravure coaters and drying ovens.

### R307-345-2. Applicability.

- [(1)—]R307-345 applies to sources located in <u>Box Elder</u>, Cache, Davis, Salt Lake, <u>Tooele</u>, Utah and Weber counties that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.
- [ (2) In Box Elder and Tooele counties, R307-345 applies to the following sources:
- (a) Existing sources as of February 1, 2013 with the potential to emit 5 tons per year or more of VOC, including related cleaning activities; and
- (b) New sources as of February 1, 2013 that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.

#### R307-345-3. Definitions.

The following additional definitions apply to R307-345:

"Coating" means a protective, functional, or decorative film applied in a thin layer to a surface.

"Fabric coating" means the coating or saturation of a textile substrate with a knife, roll or rotogravure coater to impart characteristics that are not initially present, such as strength, stability, water or acid repellency, or appearance. Fabric coatings can include, but are not limited to, industrial and electrical tapes, tie cord, utility meter seals, imitation leathers, tarpaulins, shoe material, and upholstery fabrics.

"Knife coating" means the application of a coating material to a substrate by means of drawing the substrate beneath a blade that spreads the coating evenly over the width of the substrate.

"Roller coating" the coating material is applied to the moving fabric, in a direction opposite to the movement of the substrate, by hard rubber or steel rolls.

"Rotogravure coating" means the application of a uniform layer of material across the entire width of the web to substrate by means of a roll coating technique in which the pattern to be applied is etched on the coating roll. The coating material is picked up in these recessed areas and is transferred to the substrate.

"Vinyl coating" means applying a decorative or protective top coat, or printing on vinyl coated fabric or vinyl sheets.

### R307-345-4. [Emission Standards] VOC Content Limits.

(1) Each owner or operator shall not apply coatings with a VOC content in excess of the amounts specified in Table 1 or shall use an add-on control device as specified in R307-345-6.

Fabric and Vinyl Coating Limitations (values in pounds VOC per gallon of coating, minus water and exempt solvents (compounds not classified as VOC), as applied)

COATING CATEGTORY	VOC[ EMISSION RATES]	VOC [ <del>EMISSION RATES</del> ]
	CONTENT LIMITS	CONTENT LIMITS
	Effective Through	Effective Beginning
	December 31, 2014	January 1, 2015
Fabric	2.9	2.2
Vinyl	3.8	2.2

(2) Organosol and plastisol coatings shall not be used to bubble emissions from vinyl printing and top coating.

## R307-345-5. Work Practices and Recordkeeping.

- (1) Control techniques and work practices are to be implemented at all times to reduce VOC emissions[<u>from fugitive type sources</u>]. Control techniques and work practices include:
  - (a) Tight fitting covers for open tanks or drums;
  - (b) Covered containers for solvent wiping cloths;
- (c) Collection hoods for areas where solvent is used for cleanup;
  - (d) Covered mixing tanks; and
- (e) Covered hoods and oven routed to add-on control devices, which may include, but are not limited to, after burners, thermal incinerators, catalytic oxidation, or carbon adsorption.
- (2) No person shall apply any coating unless the coating application method achieves a demonstrated 65% transfer efficiency.

The following applications achieve a minimum of 65% transfer efficiency and must be operated in accordance with the manufacturers specifications:

- (a) Foam coat;
- (b) Flow coat;
- (c) Roll coat;
- (d) Dip coat;
- (e) Die coat;
- (e) High-volume, low-pressure (HVLP) spray;
- (f) Hand application methods; or
- (g) Other application method capable of achieving at least 65% transfer efficiency, as certified by the manufacturer.
- (3) All persons shall perform solvent cleaning operations with cleaning material having VOC content of 0.21 pounds per gallon or less.
- (4) All sources subject to R307-345 shall maintain records demonstrating compliance with [  $\frac{1}{2}$  and  $\frac{1}{2}$   $\frac{1}{2}$
- (a) Records shall include, but not be limited to, inventory and product data sheets of all coatings and solvents subject to R307-345.
- (b) These records shall be available to the director upon request.

# R307-345-6. Optional Add-On Control[s] Systems Operations.

- [ (1) The owner or operator may install and maintain an incinerator, carbon adsorption, or any other add-on emission control device, provided that the emission control device will attain at least 90% efficiency performance.
- (2) The owner or operator of a control device shall provide documentation that the emission control system will attain the requirements of R307-345-6.
- (1) The owner or operator shall install and maintain an incinerator, carbon adsorption, or any other add-on emission control system, provided that the emission control system is operated and maintained in accordance with the manufacturer recommendations in order to maintain at least 90% capture and control efficiency. Determination of overall capture and control efficiency shall be determined using EPA approved methods, as follows.
- (a) The capture efficiency of a VOC emission control system's VOC collection device shall be determined according to EPA's "Guidelines for Determining Capture Efficiency," January 9, 1995 and 40 CFR Part 51, Appendix M, Methods 204-204F, as applicable.
- (b) The control efficiency of a VOC emission control system's VOC control device shall be determined using test methods in Appendices A-1, A-6, and A-7 to 40 CFR Part 60, for measuring flow rates, total gaseous organic concentrations, or emissions of exempt compounds, as applicable.
- (c) An alternative test method may be substituted for the preceding test methods after review and approval by the EPA Administrator.
- (2) The owner or operator of a control system shall provide documentation that the emission control system will attain the requirements of R307-345-6(1).
- (3) The owner or operator shall maintain records of key system parameters necessary to ensure compliance with R307-345-6. Key system parameters may include, but are not limited to, temperature, pressure and flow rates. Operator inspection schedule, monitoring, recordkeeping, and key parameters shall be in accordance with the manufacturer's recommendations, and as required to demonstrate operations are providing continuous emission reduction from the source during all periods that the operations cause emissions from the source.
- (4) The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.

#### [R307-345-7. Compliance Schedule.

(1) All sources in Davis and Salt Lake counties are subject to this rule upon the effective date.

(2) All sources within Box Elder, Cache, Tooele, Utah and Weber counties shall be in compliance with this rule by January 1, 2014.]

KEY: air pollution, emission controls, fabric coating, vinyl coating Date of Enactment or Last Substantive Amendment: [February 1, 2013]2014

Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)